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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,779	11/24/2003	Kase J. Saylor	090936.0525	4953

31625 7590 03/05/2008
BAKER BOTTS L.L.P.
PATENT DEPARTMENT
98 SAN JACINTO BLVD., SUITE 1500
AUSTIN, TX 78701-4039

EXAMINER

PAUL, DISLER

ART UNIT	PAPER NUMBER
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2615

MAIL DATE	DELIVERY MODE
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03/05/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/720,779	SAYLOR ET AL.	
	Examiner	Art Unit	
	DISLER PAUL	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/24/03; 4/26/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Response to Amendment

The newly amended will be further considered over prior art.

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. Claims 1,3-5; 7-10; 16,18-20,22-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Chrysanthakopoulos et al. (US 2004/0064320 A1) and Gosior et al. (2002/0110246 A1).

Re claim 1, Chrysanthakopoulos et al. disclose the method for providing simulated audio communications to a simulation system (page 1 [0001]), comprising the steps of: linking as a data network, a server and two or more client systems (fig.3-4; page 4[0040,0043]); sampling audio input at a first client system and resulting in sampled audio data (fig.4(141);page 5[0046 line 9-13]), transmitting the sampled audio data to the server and using the server to process the sampled audio input for creating audio effects with applying one transceiver model and at least one impairment model, wherein the transceiver model injects transceiver effects into the sampled audio input and the impairment model injects transmission effects into the sampled audio input and resulting in processed audio data (fig.4 (224); page 5[0047-8]) with filtering and 3D sound localizations and shifting to count of a few effects); transmitting the processed audio data to a second client system and converting the processed audio data to an analog audio signal at the second client system (fig.4 (316,318);page 4[0045 line 6-11; page 5[0052 line 1-10] & page 2[0008] line 30-32).

However, Chrysanthakopoulos et al. fail to disclose of the transmitting via the simulated radio transmission with audio simulation, But, Gosior et al. disclose of a wireless transmission gaming device wherein the transmitting via the simulated radio transmission with audio simulation (fig.1-3,7 par[0059,0004,0077]) for purpose of enabling wireless communication with the base transceiver. Thus, taking the combined teaching of Chrysanthakopoulos et al. and Gosior et. al as a whole, it would have been obvious for one of the ordinary skill in the art at the time of the invention to have modify Chrysanthakopoulos et al. by incorporating the transmitting via the simulated radio transmission with audio simulation for purpose of enabling wireless communication with the base transceiver.

While, the combined teaching of Chrysanthakopoulos et al. and Gosior et. al as a whole, teach of the above, with the further disclosure of radio transmission and wherein the radio transmission effects is noise due to the transmission medium (par[0046]/noise effect is added to audio transmission at server for processing).

Re claim 3, the method of claim 1, wherein the simulation system provides a visual simulation, and further comprising the step of providing a visual display corresponding to control of one or more audio qualities of the audio communications (fig.2-3; page 3[0023,0026], video games;).

Re claim 4 has been analyzed and rejected with respect to claim 3 above.

Re claim 5, the method of claim 1, wherein the transceiver model represents at least a type of receiver, transmitter, or transceiver (fig.3 (100-n)/transmitter and receiver of audio data; page 4[0038]).

Re claim 7, the method of claim 1, wherein the impairment model represents one or more attributes from the following group: channel fading, multi-path fading, propagation delay, noise (including Gaussian), Doppler shift effects, and gain control (page 5[0047-8] with (distortion effect, amplitude modulation and audio localization)).

Re claim 8, the method of claim 1, wherein the transceiver model represents a wireless receiver (Page 2[0024]) and the impairment model represents one or more attributes from the following group: filtering, noise injection, line-of-sight effects, propagation losses, and signal fading (page 5[0047-8], effect such as filtering and shifting).

Re claim 9, the method of claim 1, wherein either the first client system or the second client system or both are transceiver systems (fig.3).

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Re claim 10, the method of claim 1, wherein the impairment model uses dynamic simulated entity data (page 5[0047], dynamic simulation with amplitude, distortion).

Re claims 16,18-20,22-25 have been analyzed and rejected with respect to claims 1,3-5,7-10 respectively.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 11,26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chrysanthakopoulos et al. (US 2004/0064320 A1) and Gosior et al. (2002/0110246 A1) and further in view Hill et al. (5,636,283).

Re claim 11, the method of claim 10, However, the combined teaching of Chrysanthakopoulos et al. and Gosior et. al as a whole, fail to disclose of the further limitation wherein the dynamic simulated entity data is velocity data of the first client system or the second client system or both. But, hill et al. discloses of a system wherein having the dynamic simulated entity data being velocity data of the system (col.9 line 38-52) for the purpose of creating the

effect of a sound source moving in space. Thus, taking the combined teaching of Chrysanthakopoulos et al. and Gossior et al. and now hill et al as a whole, it would have been obvious at the time of the invention to have incorporated the having the dynamic simulated entity data being velocity data of the system as in Chrysanthakopoulos et al. for the purpose of creating the effect of a sound source moving in space.

Re claim 26 has been analyzed and rejected with respect to claim 11 above.

6. Claims 15,30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chrysanthakopoulos et al. (US 2004/0064320 A1) and Gosior et al. (2002/0110246 A1) and further in view of Choi et al. (US 6,871,176 B2).

Re claim 15, the method of claim 1 with the impairment model, However, the combined teaching of Chrysanthakopoulos et al. and Gosior et. al as a whole, fail to disclose of the further limitation wherein the impairment model is a channel noise model, based on Gaussian noise generator output data whose level is controlled by path gain. However, Choi et al. did disclose of a system wherein the similar concept of having a Gaussian noise generator output whose level is control by a path gain (fig.4 (404,406); col.13 line 55-65) for the

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purpose of being enable to synthesized the speech signal in producing good sound quality, thus taking the combined teaching of Chrysanthakopoulos et al. and Gosior et al. and Choi et al. as a whole, it would have been obvious for one of the ordinary skill in the art at the time of the invention to incorporate the having a Gaussian noise generator output whose level is control by a path gain for the purpose of being enable to synthesized the speech signal in producing good sound quality.

Re claim 30 has been analyzed and rejected with respect to claim 15 as above.

7. Claims 12,27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chrysanthakopoulos et al. (US 2004/0064320 A1) and Gosior et al. (2002/0110246 A1) and further in view of Kim (2003/0120492 A1).

Re claim 12, the method of claim 10, but, the combined teaching of Chrysanthakopoulos et al. and Gosior et. al as a whole, fail to disclose of the dynamic simulated entity data is the distance between the first client system and the second client system. But, Kim disclosed of a sound effect system wherein simulated data is the distance between the first client system and the second client system (fig.1; page 3[0037]) for the purpose of enabling the communication in the virtual environment to be effected by speech with reality. Thus, taking the combined teaching of Chrysanthakopoulos et al. and Gosior et. al and Kim as a whole, it would have been obvious to

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have modify the combined teaching of Chrysanthakopoulos et al. and Gosior et. al as a whole, by incorporating the sound effect system wherein simulated data is the distance between the first client system and the second client system for the purpose of enabling the communication in the virtual environment to be effected by speech with reality.

Re claim 27, has been analyzed and rejected with respect to claim 12 above.

8. Claims 13,28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chrysanthakopoulos et al. (US 2004/0064320 A1) and Gosior et al. (2002/0110246 A1) and further in view of Maher (6,078,669).

Re claim 13, the method of claim 1 with the impairment model sound effect, However , the combined teaching of Chrysanthakopoulos et al. and Gosior et al. as a whole, fail to disclose of the impairment model is a multipath model, based on velocity of the second client system and radio frequency. But, Maher disclose of a system wherein the similar concept of sound effect of path model wherein the parameters is based on velocity and frequency (col. 2 line 55-65; col.4 line 40-55;col.8 line 1-12) for the purpose of creating audio spatial localization for arbitrary sound source moving with a trajectory and velocity as respect to the listener in good manner. Thus, taking the

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combined teaching of Chrysanthakopoulos et al. and Gosior et al. and Maher as a whole, it would have been obvious for one of the ordinary skill in the art to have incorporated the similar concept of sound effect of path model wherein the parameters is based on velocity and frequency for the purpose of creating audio spatial localization for arbitrary sound source moving with a trajectory and velocity as respect to the listener in good manner.

Re claim 28 has been analyzed and rejected with respect to claim 13 above.

9. Claims 2,6,14,17,29,21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chrysanthakopoulos et al. (US 2004/0064320 A1) and Gosior et al. (2002/0110246 A1) and further in view of Official notice.

Re claim 2, the method of claim 1, wherein the simulation system provides tactile simulation (fig.1 (104,132a,b,134); page 3[0024]), and communication among many users and further of authenticating a player for entering in a game and interconnecting a player from one to the other (page 4[0041]; fig.3 (306)). However, the combined teaching of Chrysanthakopoulos et al. and Gosior et al. as a whole, fail to disclose of the limitation wherein further comprising the steps of using tactile simulation to select a transceiver. However,

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official notice is taken, the concept of selecting the user with using a tactile simulation is commonly known, in the art, thus it would have been obvious at the time of the invention to having incorporating the concept of using tactile simulation to select a transceiver for the purpose of being given the options to choosing the type of player to play with during the games.

Chrysanthakopoulos et al. further disclose of the transmitting data representing the selected transceiver to the server such that the selected transceiver corresponds to the transceiver model (fig.2 4 (224), each console is incorporated with such server).

Re claim 14, the method of claim 1 with the impairment model, However, Chrysanthakopoulos et al. fail to disclose of the further limitation wherein the impairment model is a Doppler effects model, based on velocity of the second client system and the angle between the first client system and the second client system. However, official notice is taken that the idea of determining the Doppler effect which is based on velocity and angle positions is commonly known in the art, thus it would have been obvious for one of the ordinary skill in the art to have incorporated the similar concept of determining the Doppler effect which is based on velocity and angle positions for creating the sound effect based on positional movement of the sound source.

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Re claims 17,29 have been analyzed and rejected with respect to claim 2 and 14 respectively.

Re claim 6, the method of claim 1, But, the combined teaching of Chrysanthakopoulos et al. and Gosier et al. as a whole, fail to disclose of the transceiver model represents at least the transceiver power. However, official notice is taken that the limitation of having the transceiver model representing the transceiver power is commonly known in the art, thus it would have been obvious for one of the ordinary skill in the art at the time of the invention to have incorporated the additional feature of having the transceiver model representing the transceiver power for purpose of creating sound effect based on power model of transceiver.

Re claim 21 has been analyzed and rejected with respect to claim 21

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DISLER PAUL whose telephone number is (571)270-1187. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. P./

Examiner, Art Unit 2615



VIVIAN CHIN

SUPERVISORY PATENT EXAMINER